

Please type a plus sign (+) inside this box →

PTO/SB/08A (08-00)

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

**Substitute for form 1449A/PTO**

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 3

**Complete if Known**

~~RECEIVED~~

APR 24 2002

Technology Center 2100

U.S. PATENT DOCUMENTS					Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	U.S. Patent Document	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY		
		Number				
RIE	3,257,646		Roth	06-21-1966		
RIE	3,353,159		Lee, III	11-14-1967		
RIE	4,244,033		Hattori	01-06-1981		
RIE	4,575,818		Almy et al.	03-11-1986		
RIE	4,622,653		McElroy	11-11-1986		
RIE	4,656,626		Yudichak et al.	04-07-1987		
RIE	4,670,858		Almy	06-02-1987		
RIE	4,845,668		Sano et al.	07-04-1989		
RIE	4,958,377		Takahashi	09-19-1990		
RIE	4,996,666		Duluk, Jr.	02-26-1991		
RIE	5,053,991		Burrows	10-01-1991		
RIE	5,072,422		Rachels	10-10-1991		
RIE	5,123,105		Wyland et al.	06-16-1992		
RIE	5,319,589		Yamagata et al.	06-07-1994		
RIE	5,383,146		Threewitt	01-17-1995		
RIE	5,394,353		Nusinov et al.	02-28-1995		
RIE	5,440,715		Wyland	08-08-1995		
RIE	5,483,480		Yoneda	01-09-1996		
RIE	5,485,418		Hiraki et al.	01-16-1996		
RIE	5,555,397		Sasama et al.	09-10-1996		

Examiner Signature	R. Emmons	Date Considered	6-27-2004
-----------------------	-----------	--------------------	-----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**Substitute for form 1449A/PTO**

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(use as many sheets as necessary)*

Sheet 2 of 3

**Complete if Known**

Application Number	10/000,122
Filing Date	October 31, 2001
First Named Inventor	Nataraj, B.
Group Art Unit	2185 2187
Examiner Name	R. Elmore
Attorney Docket Number	N1-P109

RECEIVED  
APR 2 4 2002  
U.S. Patent and Trademark Office

RECEIVED  
11/20

11/17/02

APR 2  
Technology Center 2100

## U.S. PATENT DOCUMENTS

## FOREIGN PATENT DOCUMENTS

Examiner  
Signature

R. Emore

Date  
Considered

6-27-2004

**\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.**

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.







Please type a plus sign (+) inside this box →  +

PTO/SB/08B (08-00)  
Approved for use through 10/31/2002. OMB 0651-0031  
U. S. Patent and Trademark Office: U. S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 2

### Complete if Known

Application Number	10/000,122
Filing Date	October 31, 2001
First Named Inventor	Nataraj, B.
Group Art Unit	2485 2187
Examiner Name	R. Emore
Attorney Docket Number	N1-P109

RECEIVED  
JUN 14 2002  
Technology Center 2100

### OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
RIE		PANKAJ GUPTA, STEVEN LIN and NICK MCKEOWN, "Routing Lookups in Hardware at Memory Access Speeds," Proc. Infocom, San Francisco, April 1998, pp.1-8	
RIE		NEN-FU HUANG, SHI-MING ZHAO, JEN-YI PAN and CHI-AN SU, "A Fast IP Routing Lookup Scheme for Gigabit Switching Routers," IEEE, 1999, pp.1429-1436	
RIE		NEN-FU HUANG and SHI-MING ZHAO, "A Novel IP-Routing Lookup Scheme and Hardware Architecture for Multigigabit Switching Routers," IEEE Journal on Selected Areas In Comm., Vol. 17, No. 6, June 1999, pp. 1093-1104	
RIE		TSUNEMASA HAYASHI and TOSHIAKI MIYAZAKI, "High-Speed Table Lookup Engine for IPv6 Longest Prefix Match," IEEE Global Telecommunications Conference, 1999, pp. 1576-1581	
RIE		MASAYOSHI KOBAYASHI, TUTOMU MURASE and ATSUSHI KURIYAMA, "A Longest Prefix Match Search Engine for Multi-Gigabit IP Processing," IEEE, 2000, pp. 1360-1364	
RIE		MASAYOSHI KOBAYASHI and TUTOMU MURASE, "A Processor Based High-Speed Longest Prefix Match Search Engine," IEEE, 2001, pp. 233-239	
RIE		MARCEL WALDOGEL, GEORGE VARGHESE, JON TURNER and BERNHARD PLATTNER, "Scalable High-Speed Prefix Matching," ACM Transactions on Computer Systems, Vol. 19, No. 4, November 2001, pp. 440-482	
RIE		V. SRINIVASAN and GEORGE VARGHESE, "Fast Address Lookups Using Controlled Prefix Expansion," ACM Transactions on Computer Systems, Vol. 17, No. 1, February 1999, pp. 1-40	
RIE		MARCEL WALDOGEL, GEORGE VARGHESE, JON TURNER and BERNHARD PLATTNER, "Scalable High Speed IP Routing Lookups," ACM SIGCOMM, 1997, pp. 25-35	
RIE		MASAYOSHI KOBAYASHI, TUTOMU MURASE, NAOYUKI OGURA and ATSUSHI KURIYAMA, "A 50 Mpps Longest Prefix Match Search Engine LSI for Multi-Gigabit IP Forwarding," Technical Report of IEICE, IN08-119, November 1998, pp. 7-12	X

Examiner Signature

R. Emore

Date Considered

6-27-2004

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.